

*Female genitalia*.—As figured.

*Type*.—U.S.N.M. no. 61307.

*Type locality*.—Coral Gables, Dade County, Fla.

*Food plant*.—*Baccharis* sp.

*Remarks*.—Described from the type male and three male and two female paratypes from the type locality, all reared by Prof. H. F. Strohecker. All bear emergence dates of March 1951. Paratypes in the U. S. National Museum; Department of Zoology, University of Miami, Coral Gables, Fla.; and the British Museum (Natural History).

Previously the genus *Prionoxystus* was represented in North America by only two described species, *P. robiniae* (Peck) (carpenterworm) and *P. macmurtrei* (little carpenterworm). *P. baccharidis*, for which I suggest the common name "saltbush carpenterworm," is nearest *robiniae*, but is smaller, and the yellow hindwing of *robiniae* is replaced by the dark hindwing in *baccharidis*.

Of this species Professor Strohecker writes: "The specimens were bred from the trunks of the *Baccharis*. Roy Woodbury, of our botany department, tells me that the stand of *Baccharis*

from which I cut the pieces includes (my memory) four species . . . The larvae occur most frequently in the bole near ground level but some of them were found in branches not much more than an inch in diameter. All the wood cut by me was from living bushes.

"The exact locality was an area near what is known locally as 'Tahiti Beach.' The mangrove growth near the bay is followed inland by a growth of saltbush. I don't know the history of this place, i. e., whether the saltbush is a 'natural' stand or sprang up after removal of such plants as white mangrove and buttonwood. Some of the *Baccharis* have trunks three or more inches in diameter but all are of low height.

"Last March I went to the site where he [Mr. Reimer] had found the larvae and cut several bushes. Those with large larvae can be detected by the exudations of sawdust from the borings. The little insects are of such powerful flight when adult that they quickly damage themselves in a cage."

The photographs for this paper were taken by Robert Bonde, of the U. S. Department of Agriculture. Drawings by the author. The figures are of the type male and a paratype female.

## PALEONTOLOGY.—*Two new species of Sinclairocystis*. HARRELL L. STRIMPLE, Bartlesville, Okla. (Communicated by Alfred R. Loeblich, Jr.)

Subsequent to the finding of *Sinclairocystis* Bassler (1950), by Dr. G. A. Cooper and William Allen, of the U. S. National Museum, in Ordovician rocks of southeastern Oklahoma, the author and his wife, Mrs. Melba Strimple, have collected at the type locality on several occasions and have found several interesting forms of the "Cystoidea." Among these are two new species of *Sinclairocystis* described below. They lend considerable additional information concerning this unique genus.

### *Sinclairocystis angulatus*, n. sp.

Fig. 5-9

Two recumbent arms are present, that to the left terminating near the columnar attachment, the right passing closely behind the anus and forming a loop to the posterior about the large posterior thecal plates and terminating high on the theca. On the antanal side of the left arm, food grooves are seen passing from the facets

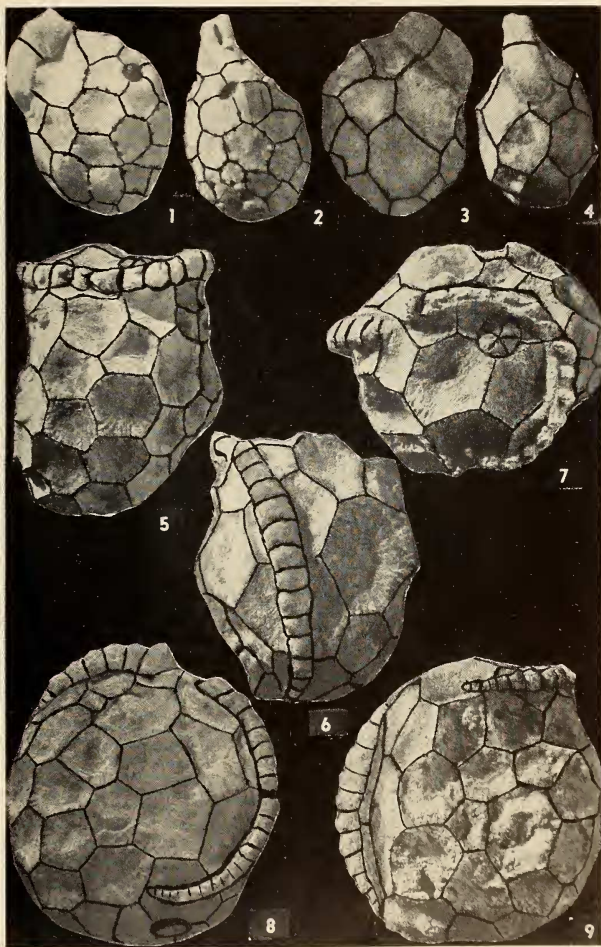
for the brachioles to a more or less continuous groove along the length of the arm. The same process is present on the anal side of the right arm. One brachiole facet is present on each arm segment and no covering plates over the grooves have been observed.

There are three basal plates and four plates surrounding the anus. In the anal (posterior) side of the theca, an angulation occurs to the left, forming a more or less flattened surface in what might be termed the left posterior, and is bordered to the left by the left arm. In this restricted area there are only two large plates between the basal circlet and the plates adjacent to the anus. In the lateral wall of the posterior thecal plates are small, with four or five present between the basals and the summit platform which is bordered by the right arm. The right lateral side of the theca has two series of six small plates between the basals and the right arm. The antanal (anterior) is composed of slightly larger plates than those of the right side and considerably larger plates as the left arm

bearing ray is approached. In the first mentioned area, four or five plates are present between basals and those plates adjoining the anus and in the latter area only three. The left arm-bearing

ray is composed of three large and two small plates, including the basal and summit plates.

The anal opening is covered by a low pyramid-like circlet of five triangular shaped plates. What



FIGS. 1-4.—*Sinclairocystis sulphurensis*, n. sp., posterior side, right side, anterior side and left side,  $\times 4$ ; FIGS. 5-9.—*Sinclairocystis angulatus*, n. sp., right side, left side, top view, anterior side and posterior side,  $\times 2.5$ .

appears to be a small opening (hydropore?) occurs in the median portion of the first plate below the mouth on the antanal side of the theca and is marked by a tubercle like projection.

Most thecal plates are hexagonal, but several have five sides and a few have as many as seven sides. All except those of the anal pyramid have strongly depressed median sections and are marked by fine grooves, which are perpendicular to the sides of the plates. There is indication that near the sutures some grooves penetrate the theca. Granular ornamentation is present on all thecal plates except those of the anal pyramid.

Measurements of the holotype are as follows: Maximum height of theca (including arms), 20.2 mm; maximum width, 19.1 mm; diameter of anus, 2.5 mm; length of left arm, 24.6 mm; length of right arm, 28.2 mm.

*Remarks.*—*S. angulatus* is readily separable from *S. praedecta* Bassler (1950) in possession of more numerous thecal plates, a different shape to the theca, and the distinctive attitude of the right arm in the former species. In *S. praedecta*, the right arm curves down the right side of the theca with only slight curvature toward the posterior. In the present species the right arm forms an uncompleted circular loop, terminating high on the theca in posterior position. *S. sulphurensis* has the same arm placement as *S. praedecta* but differs in several respects from either species.

*Occurrence.*—Blackriverian (Bromide formation, near top of green shale), 1.8 miles south of Sulphur, Okla.

*Holotype.*—Collected by the author. To be deposited in the U. S. National Museum.

### *Sinclairocystis sulphurensis*, n. sp.

Figs. 1-4

Theca is small, rotund in outline. A portion of the left arm is preserved which shows the proportionately large nature of these appendages. Most thecal plates are hexagonal but several have from five to seven sides. The larger plates are in the anterior where only two or three plates are interposed between the basals and the four plates adjoining the anus. Median portions of the thecal plates are shallowly depressed and round holes mark the sutures, particularly in the posterior and right sides of the theca. No ornamentation is present.

Measurements of the holotype are as follows: Maximum height of theca (including arm), 10.2 mm; maximum width of theca (excluding arms), 6.7 mm; diameter of anal opening, 1.2 mm.

*Remarks.*—*S. sulphurensis* differs from *S. angulatus* and *S. praedecta* in outline of theca, small size, and lack of ornamentation. The small number of thecal plates and the attitude of the arms indicates closer affinity to *S. praedecta* than to *S. angulatus*. The openings into the body cavity found along the sutures are not so numerous and have a circular outline as compared to the innumerable openings along the sutures of *S. praedecta*, which have rectangular outlines.

*Occurrence.*—Blackriverian (Bromide formation, near top of green shale), 1.8 miles south of Sulphur, Okla.

*Holotype.*—Collected by Mrs. Melba Strimble. To be deposited in the U. S. National Museum.

## BOTANY.—A new Nymphoides from Colombia.<sup>1</sup> LYMAN B. SMITH, U. S. National Museum.

The present species is one of many recent novelties which indicate that the flora of the eastern Llanos of Colombia is still poorly known in spite of a great increase in collections by local and foreign botanists.

### *Nymphoides flaccida* L. B. Smith, sp. nov.

Fig. 1

Foliorum laminis oblongis, basi cuneatis bis cordatis, flaccidis; corolla alba, lobis fimbriatis.

Plant submersed; stems elongate, 2.5 mm in diameter, bearing one to several leaves and a

cluster of flowers at the apex; petioles from very short on the largest leaves to 6 cm long on some of the smaller ones; blades oblong, slightly broader toward the cuneate to cordate base, broadly obtuse, flaccid with repand margins, 8 cm long, 2.5 cm wide, glandular; pedicels slender, 7 cm long, naked, glabrous; sepals linear, 6 mm long; corolla white, over 2 cm in diameter, its lobes long-fimbriate; fruit unknown.

Type in the Herbario Nacional Colombiano, collected in the Caño Quenane, eastern Llanos, Territory of Meta, Colombia, January 25, 1942, by A. Dugand and R. Jaramillo M. (no. 3121).

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